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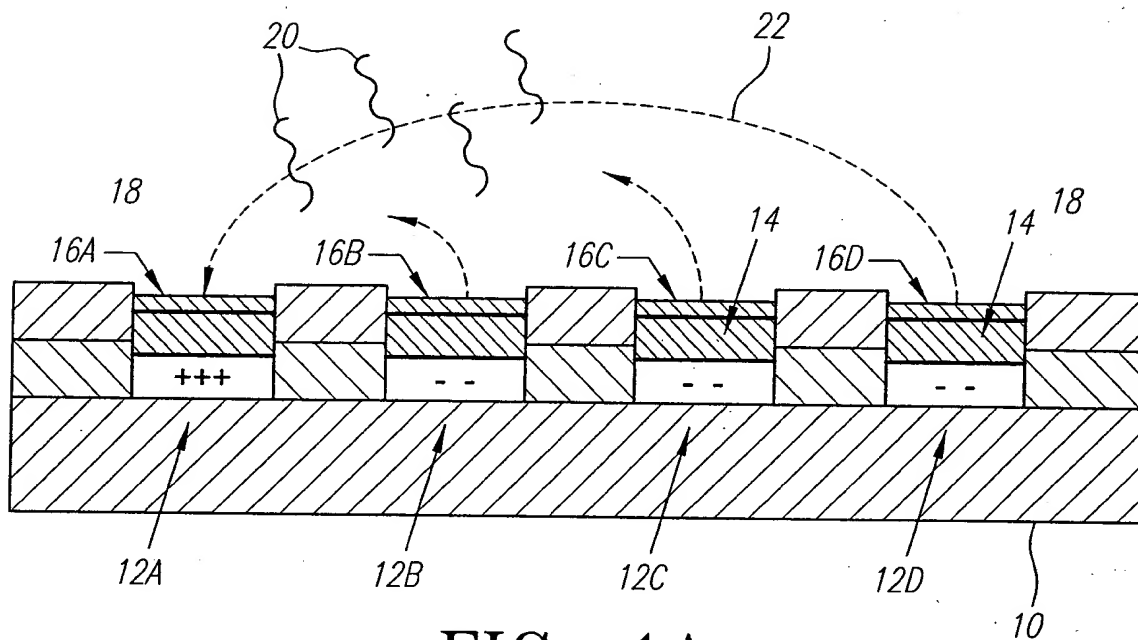


FIG. 1A

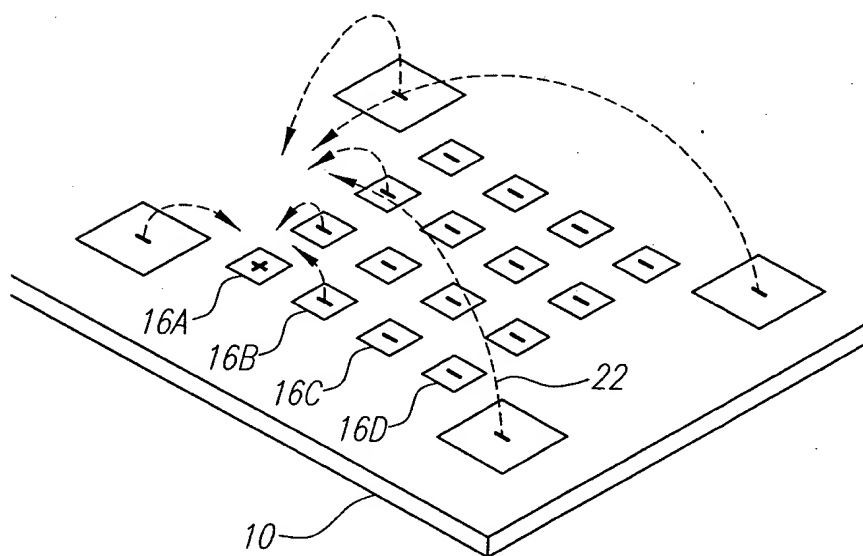
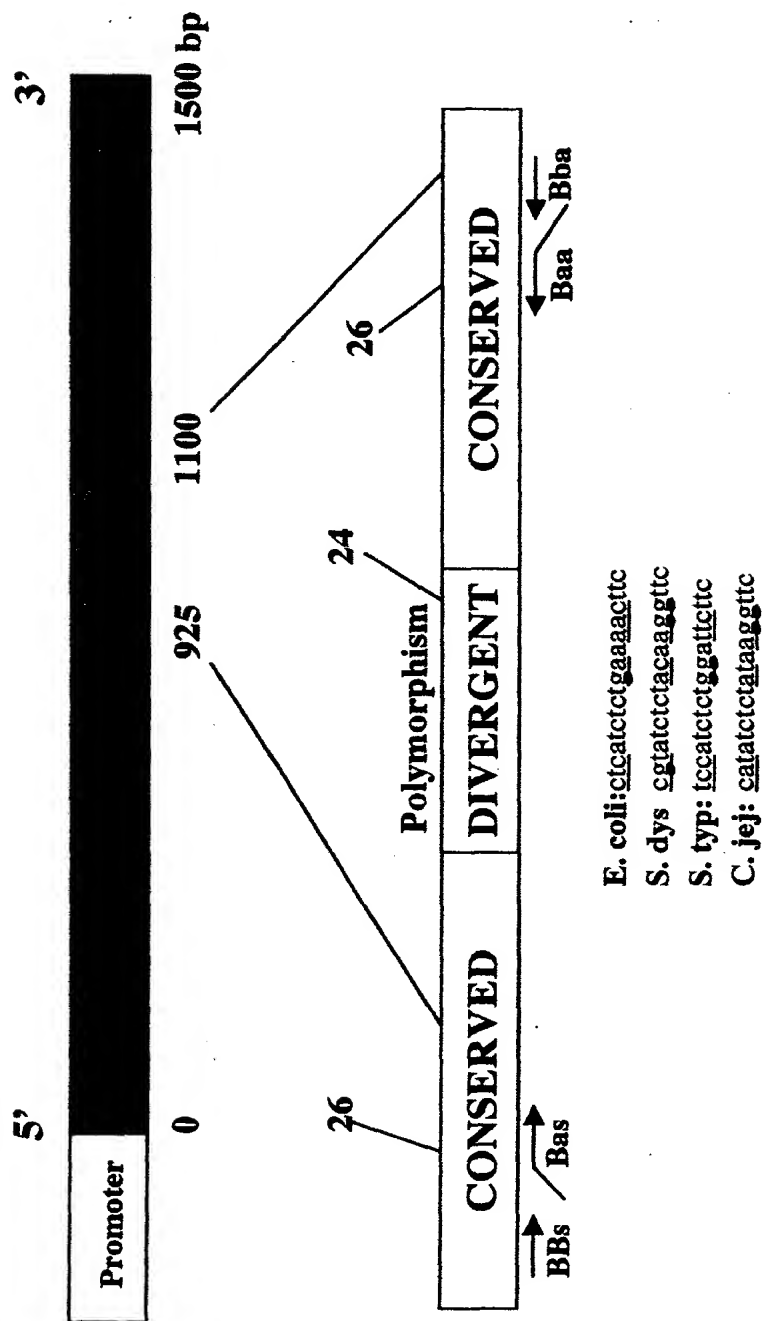


FIG. 1B

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FIGURE 2A



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FIGURE 2B

Control
E.coli 0157:H7
Shigella
Salmonella
M1 M2



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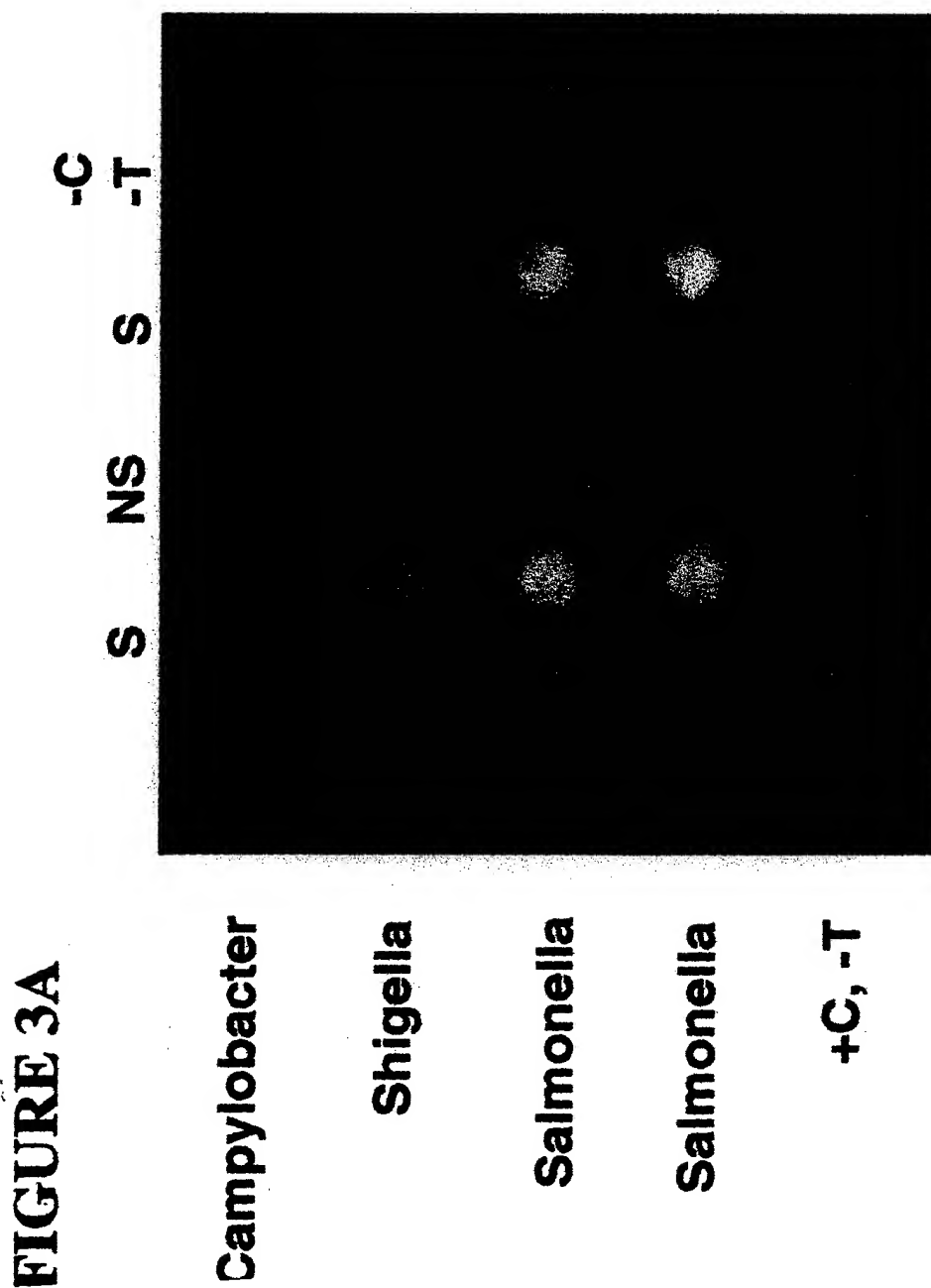


FIG. 2D



FIG. 20

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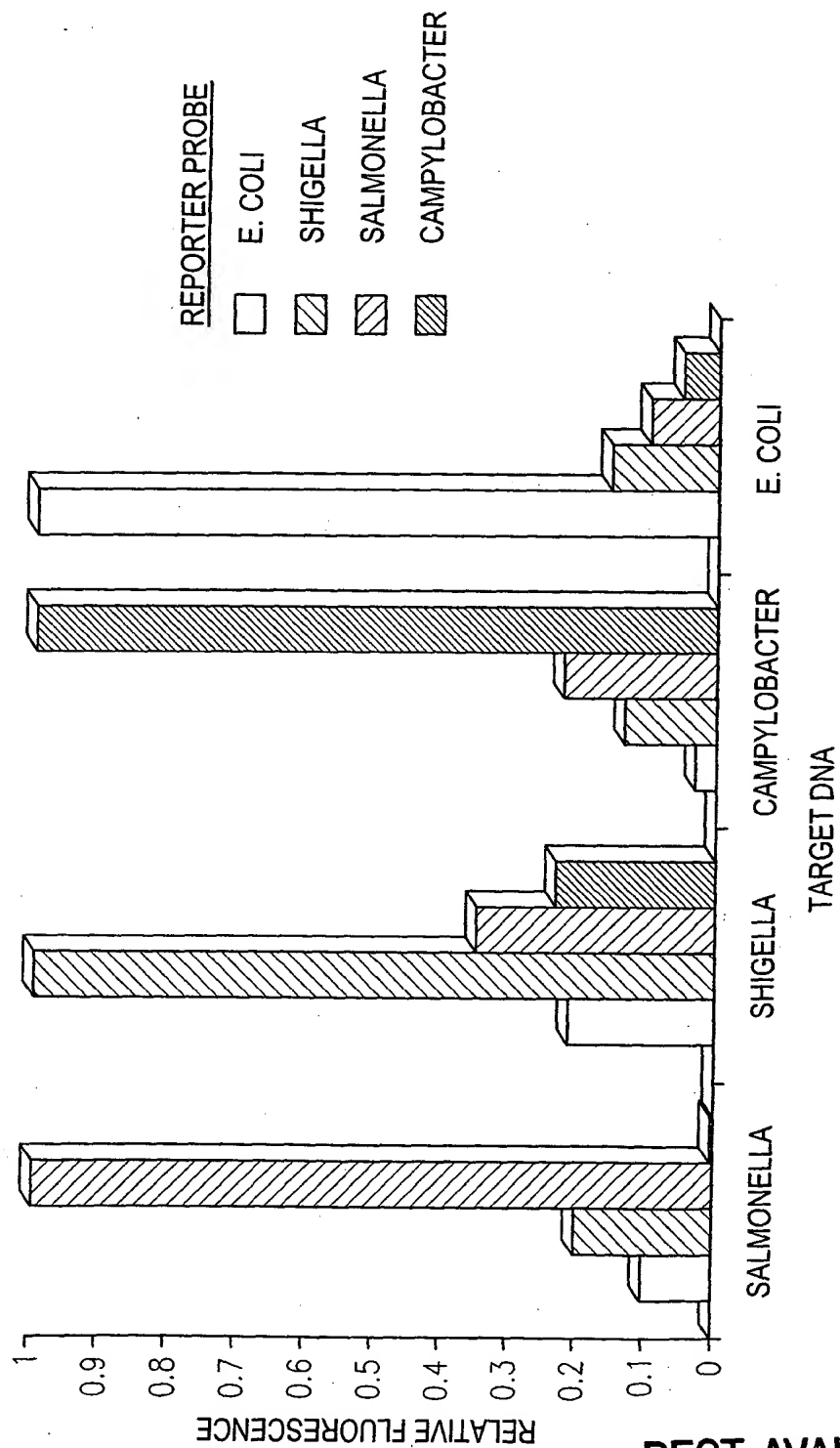


FIG. 3B

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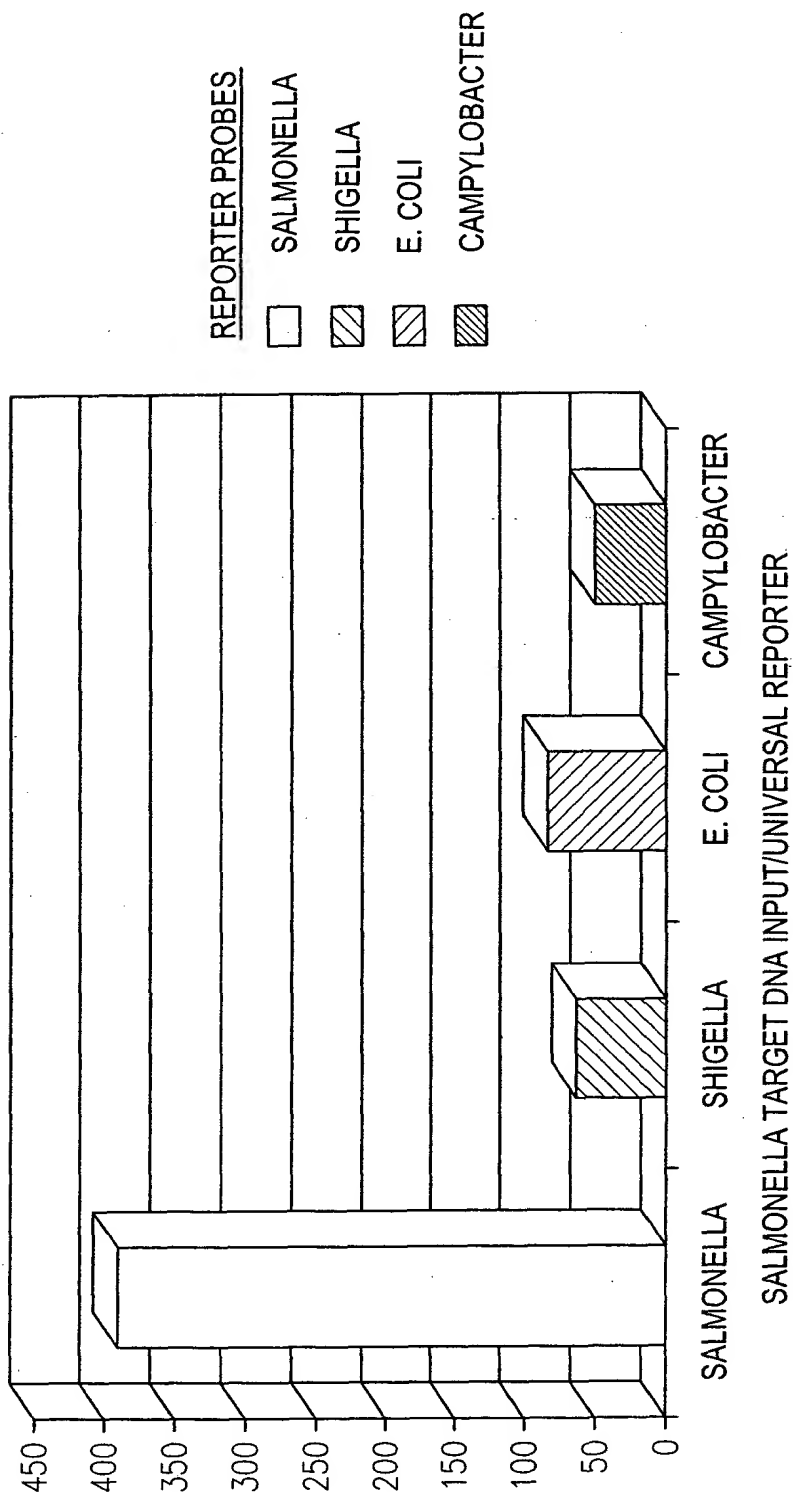


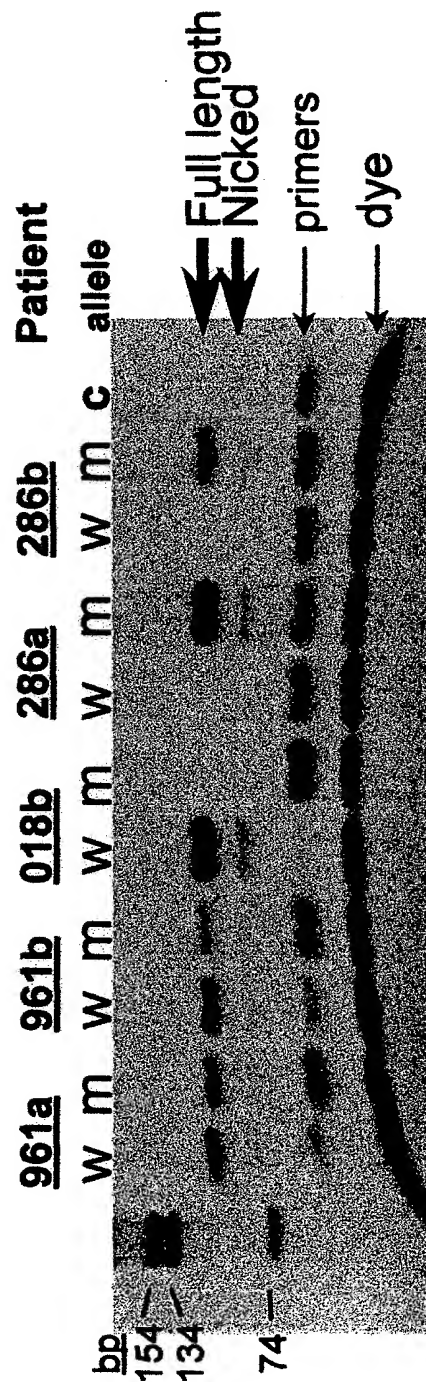
FIG. 3C

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T.D.6.D.D.T. 5.2.9.4.2.6.5.0

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FIGURE 4A



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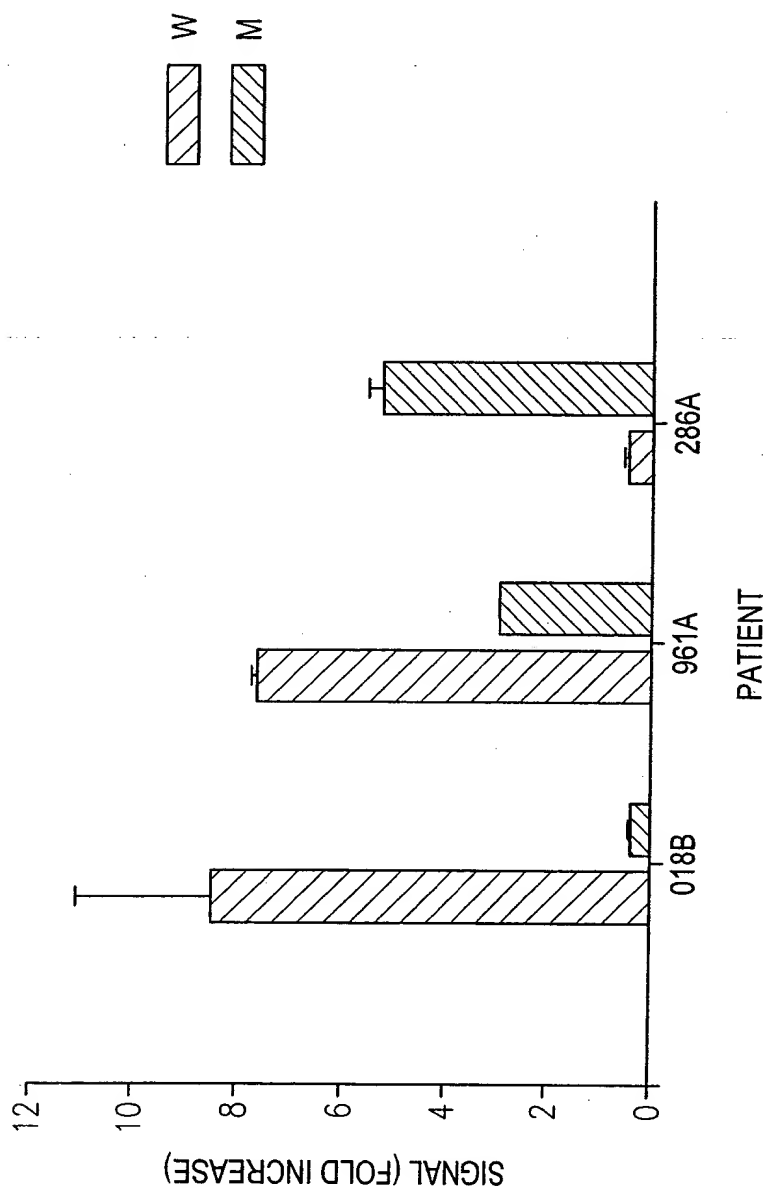
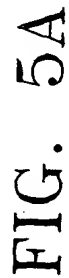


FIG. 4B



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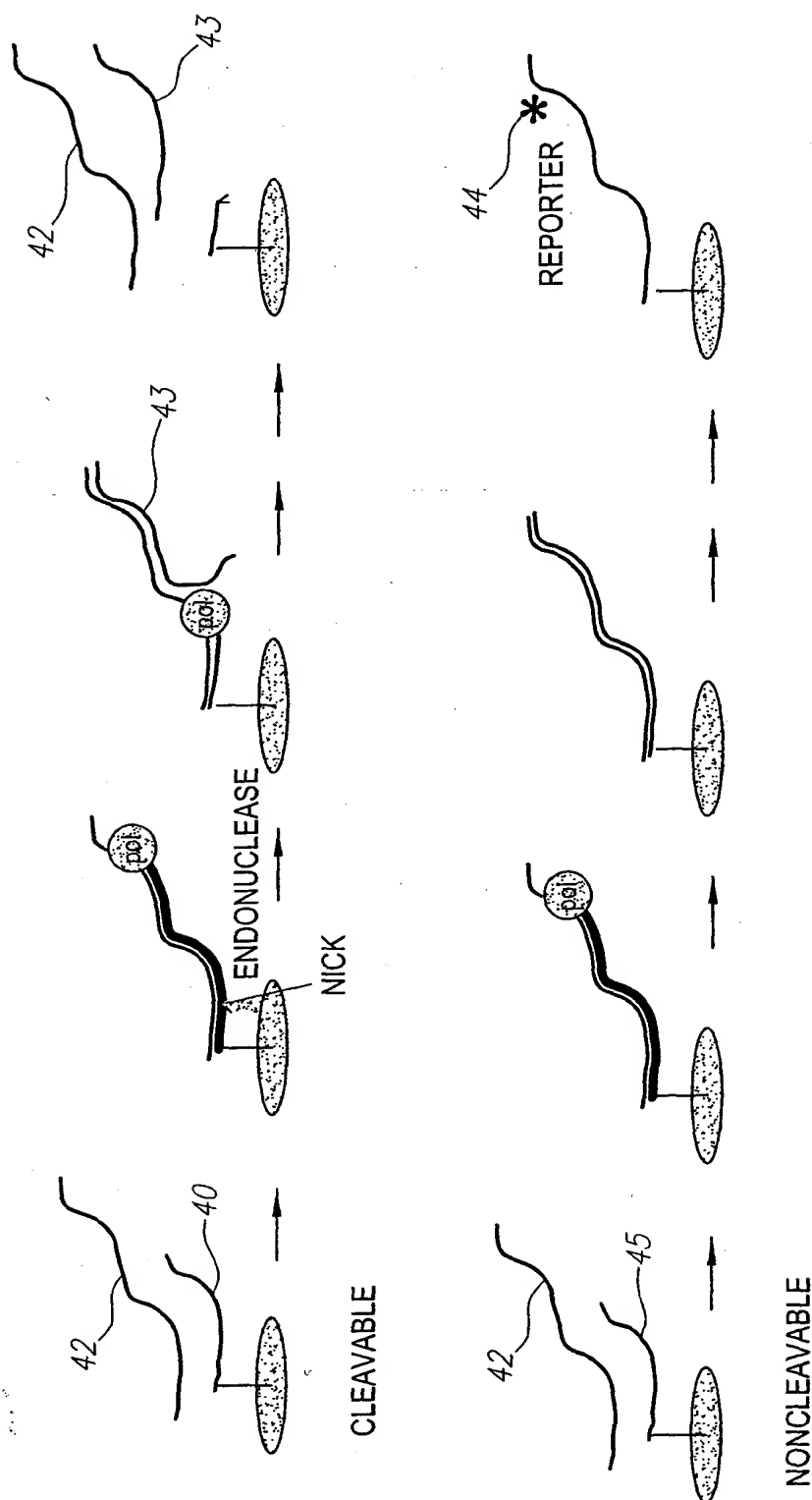
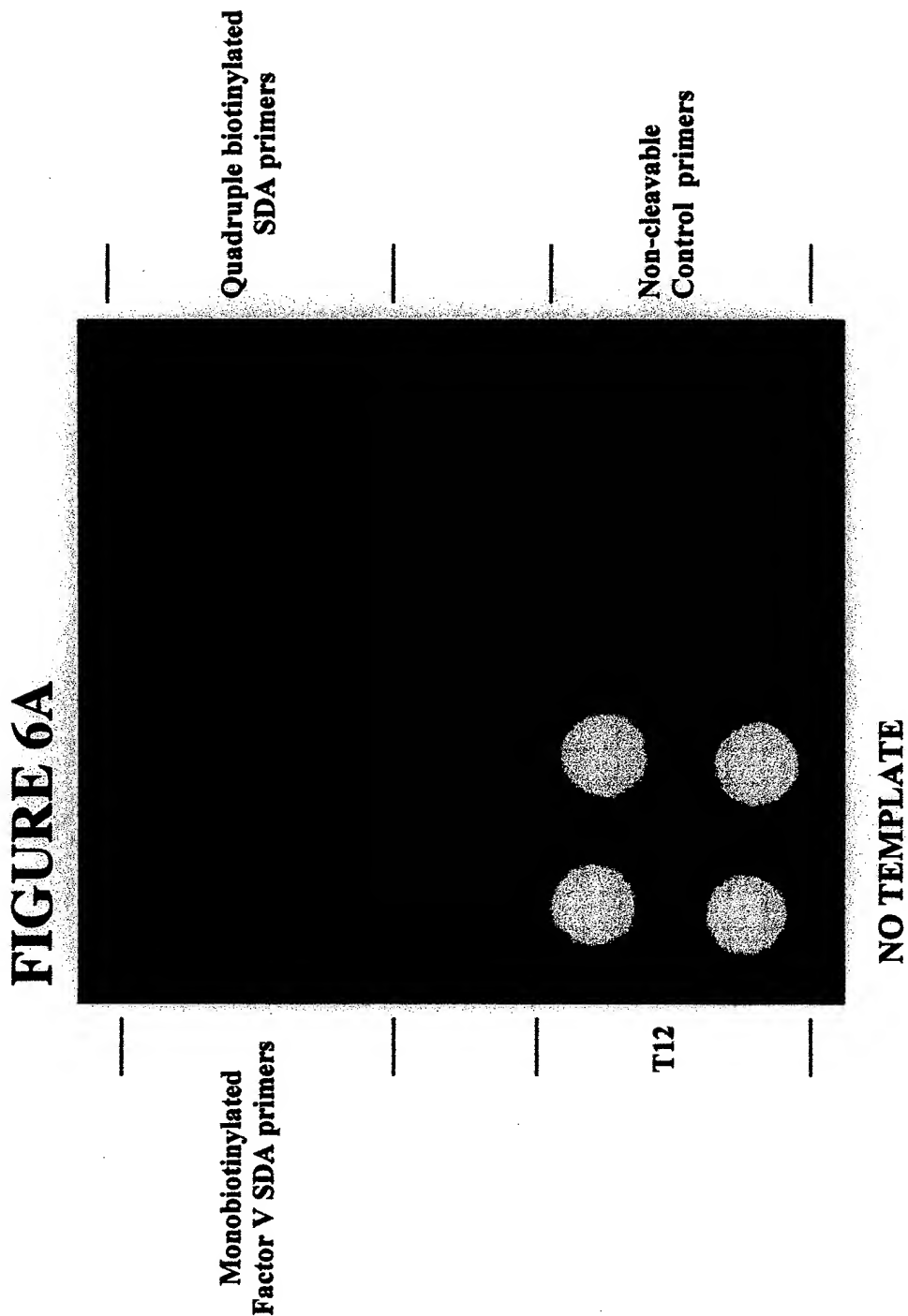


FIG. 5B

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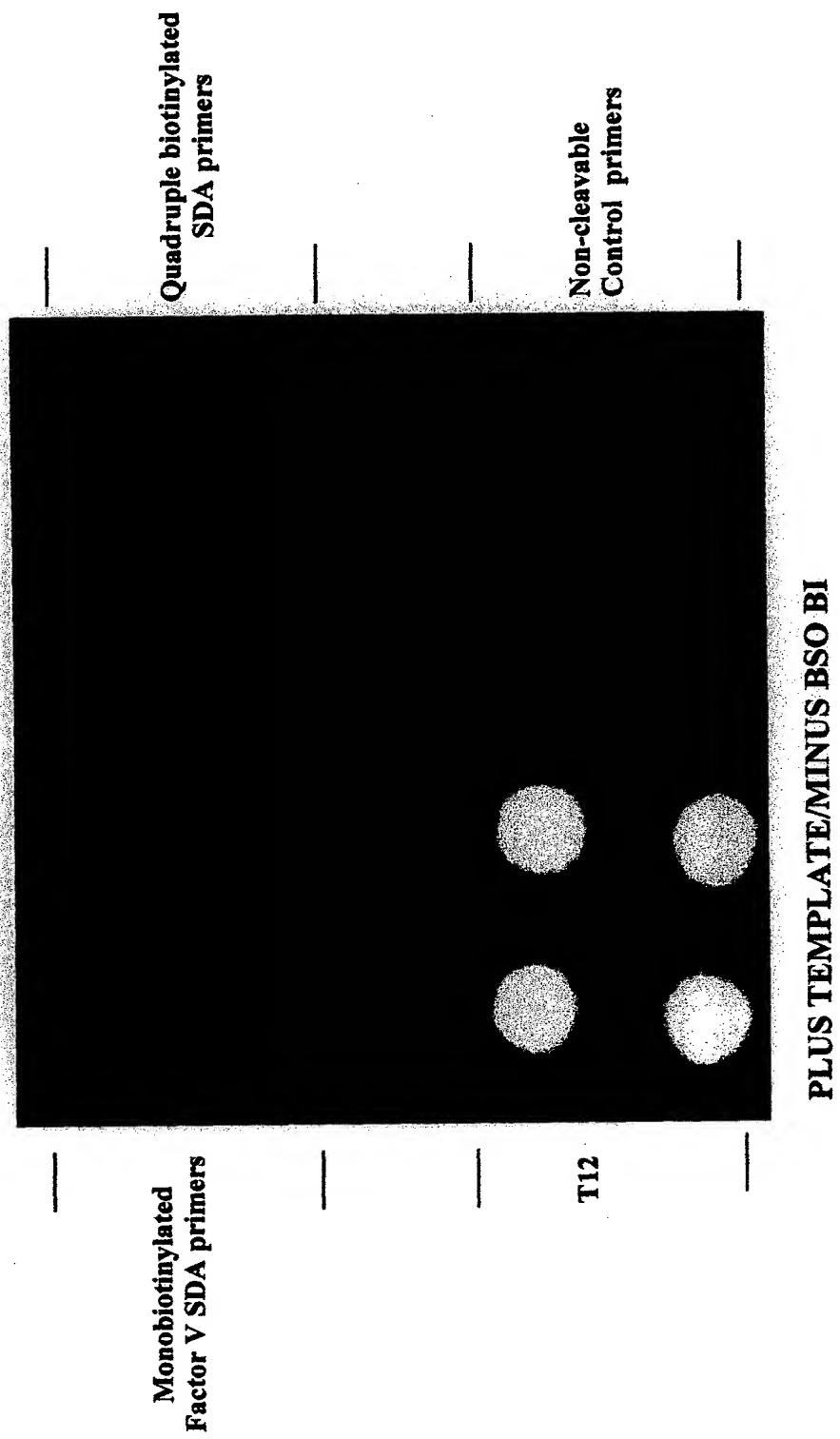
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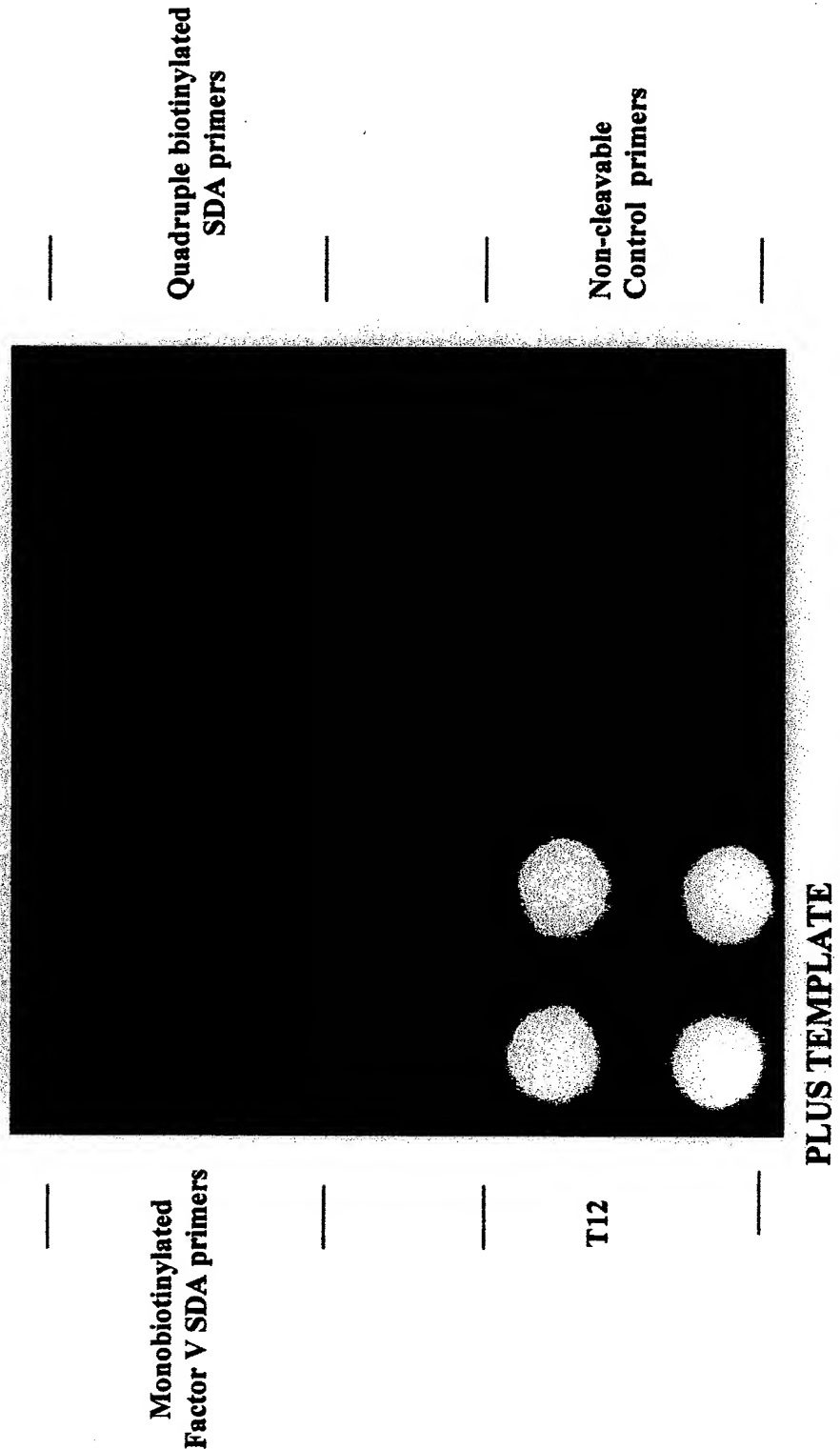
TOPDOT" 58942660

FIGURE 6B



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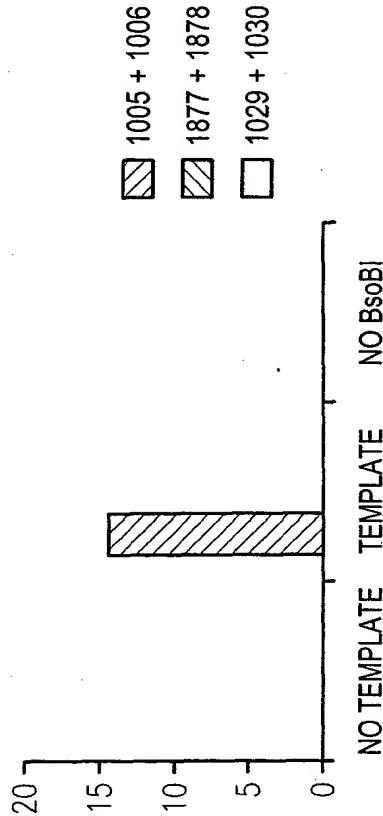
FIGURE 6C



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HUMAN COAGULATION FACTOR V ANCHORED SDA IN SITU
ON MICROCHIPS

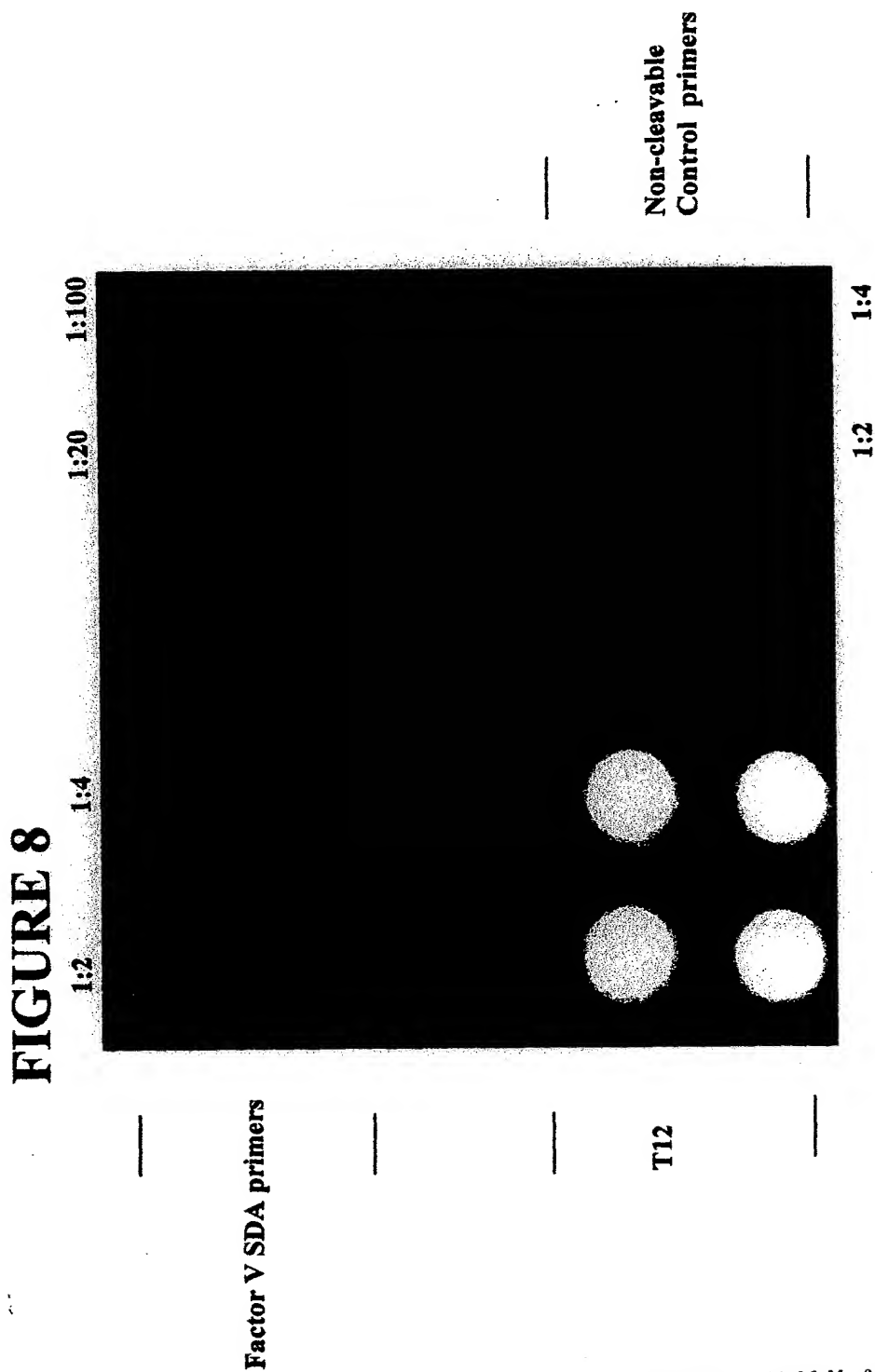


1005 + 1006 = MONOBIOTINYLATED PROBES
1877 + 1878 = QUADRUPLE-BIOTINYLATED PROBES
1029 + 1030 = NON-CLEAVABLE CONTROL PRIMERS

FIG. 7

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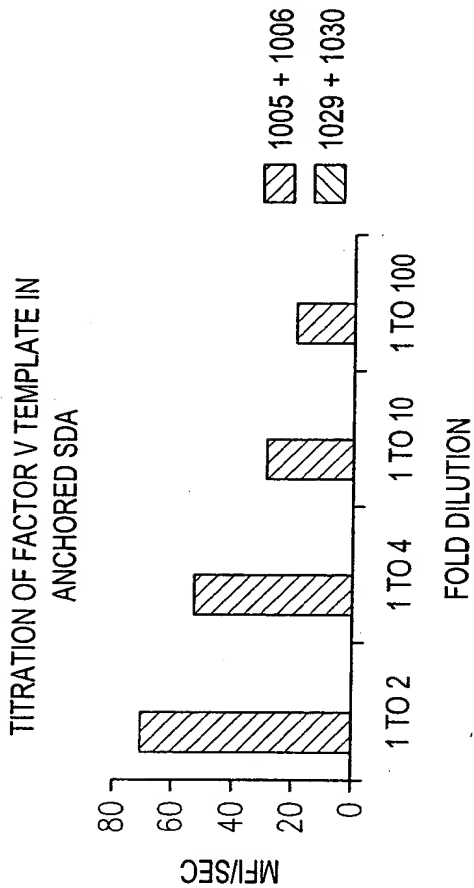
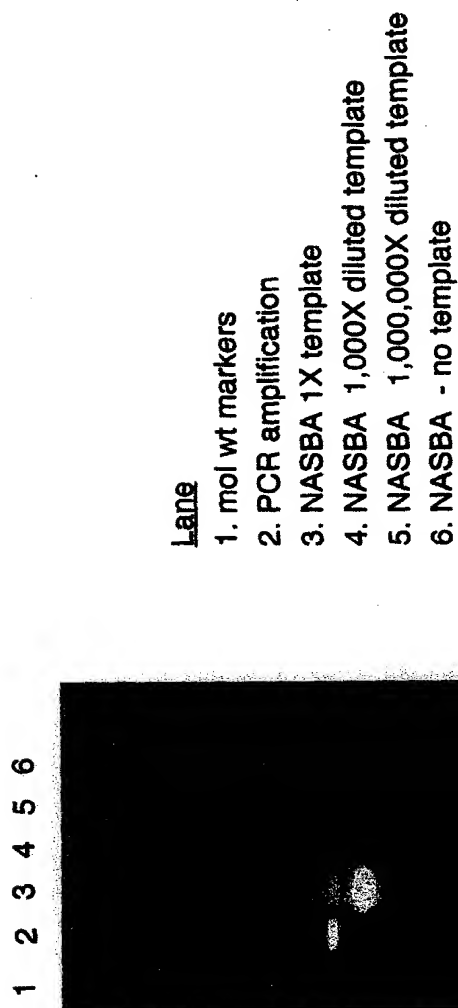


FIG. 9

1005 + 1006 = FACTOR V SDA PRIMERS
1029 + 1030 = NON-CLEAVABLE CONTROL PRIMERS

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FIGURE 10A



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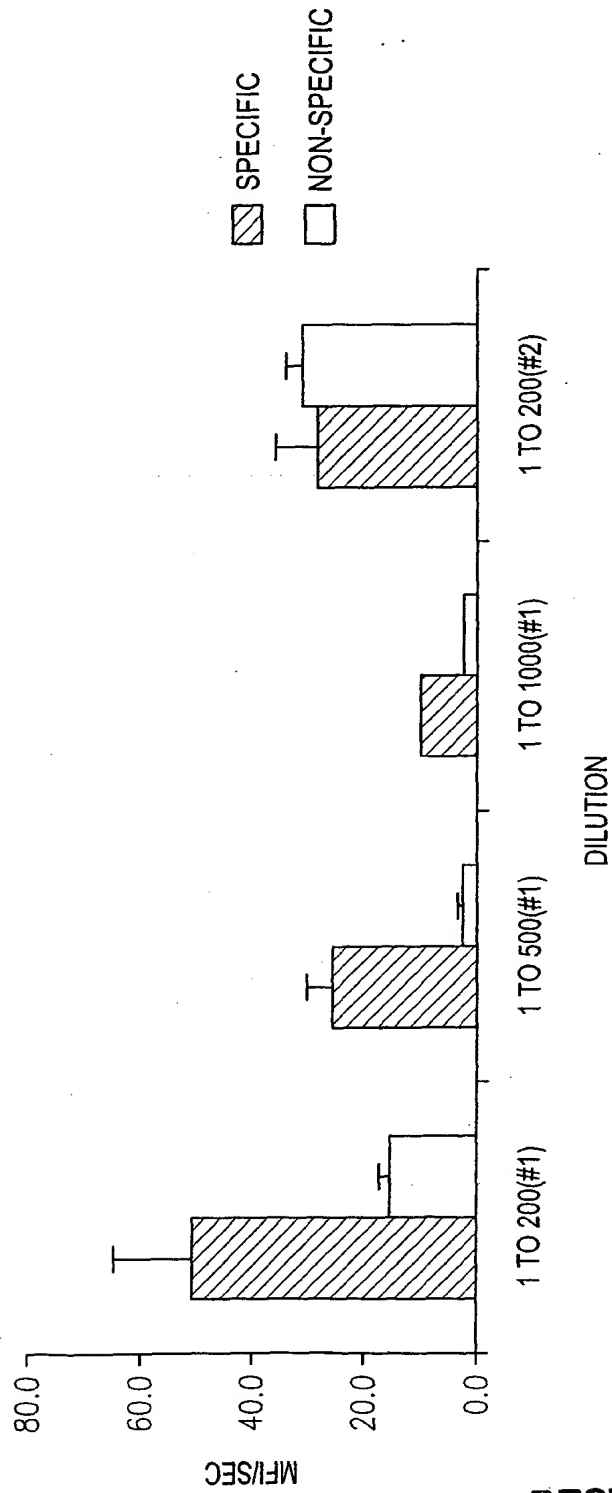


FIG. 10B

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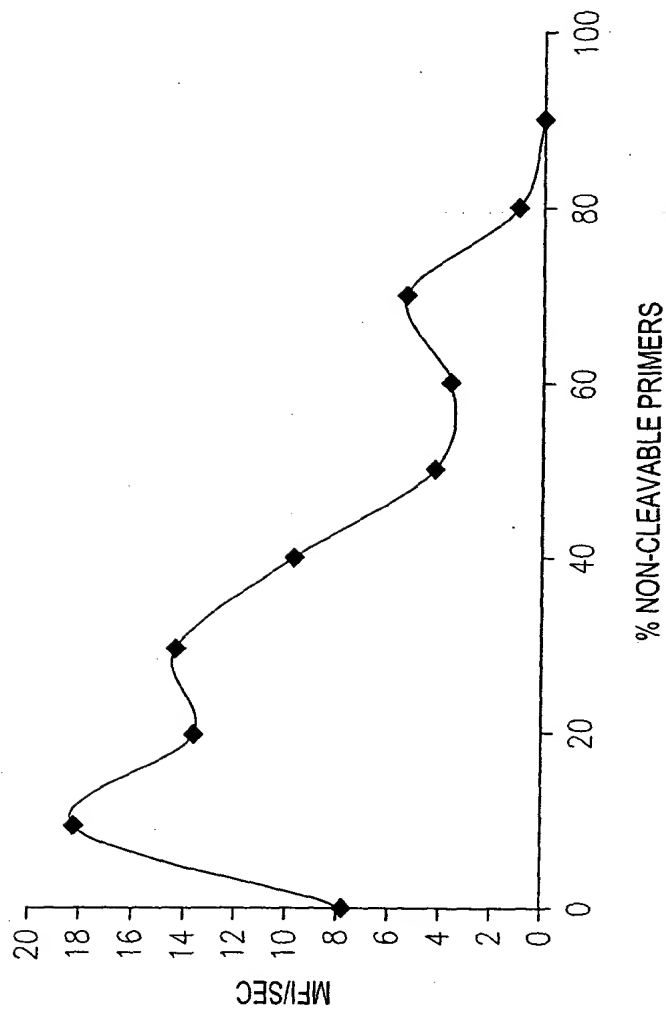


FIG. 11

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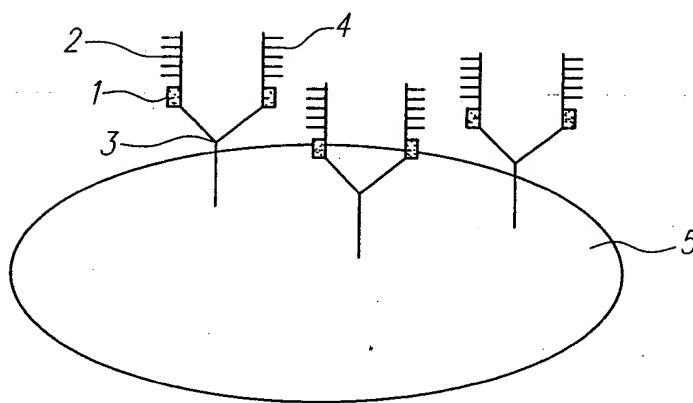


FIG. 12

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TOP SECRET 58942660

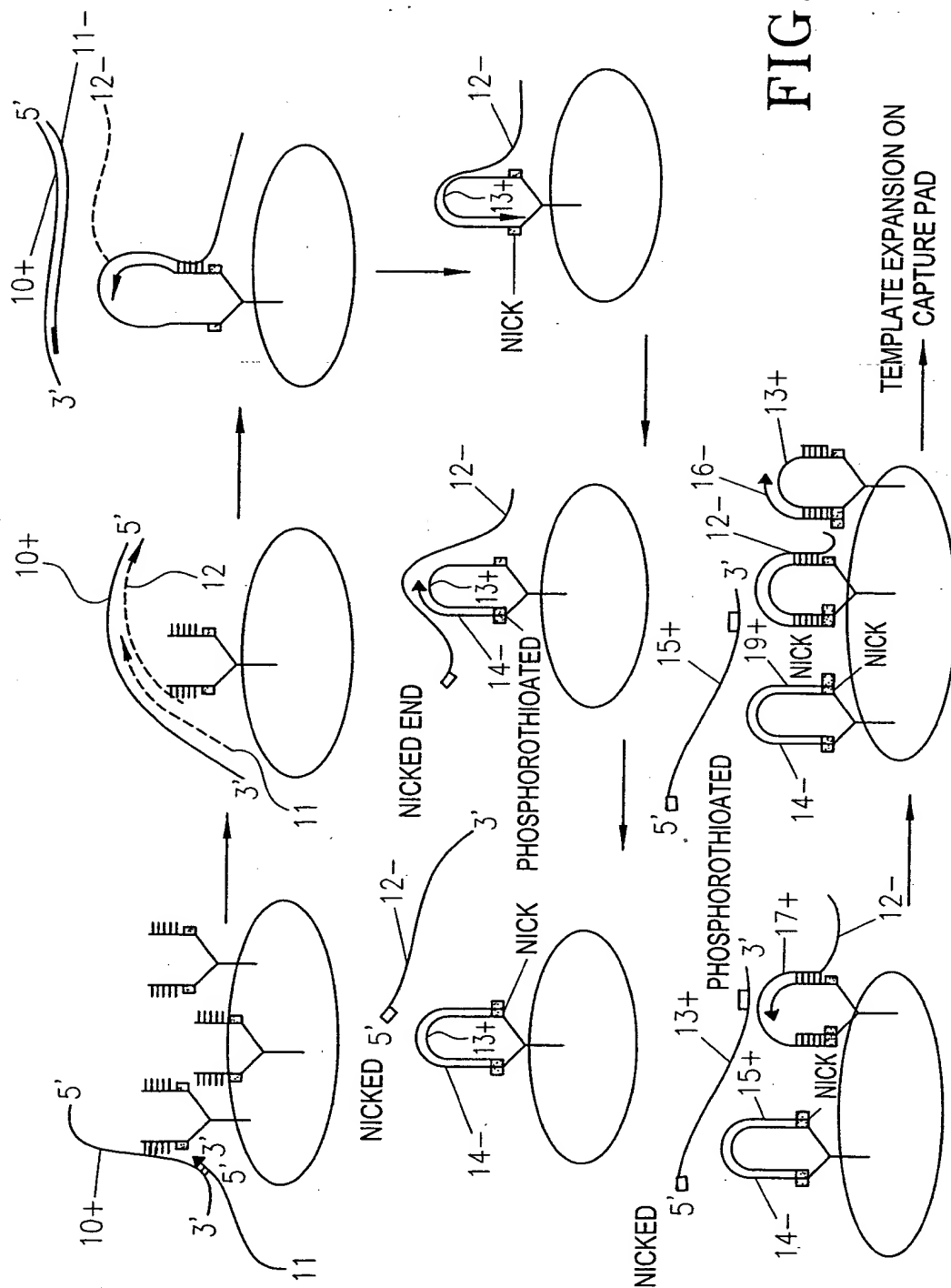
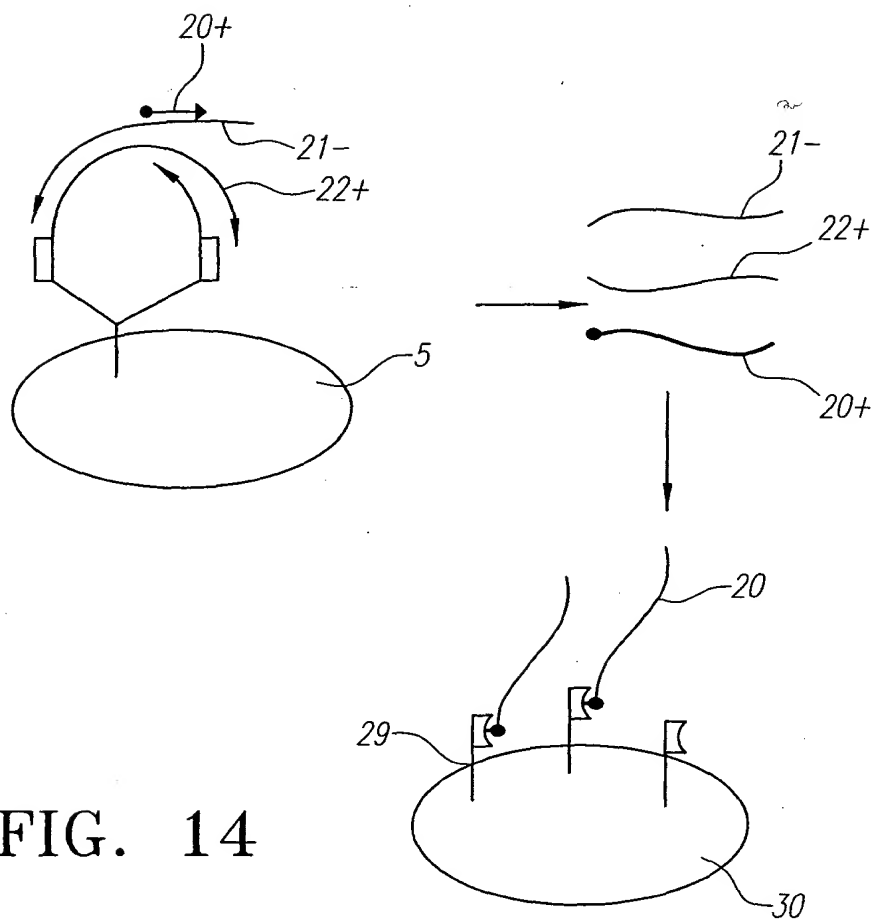


FIG. 13



09974685 100904



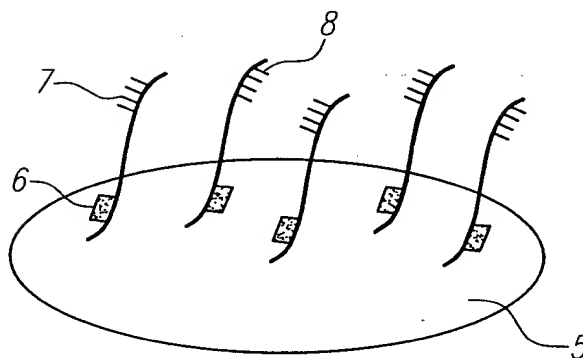
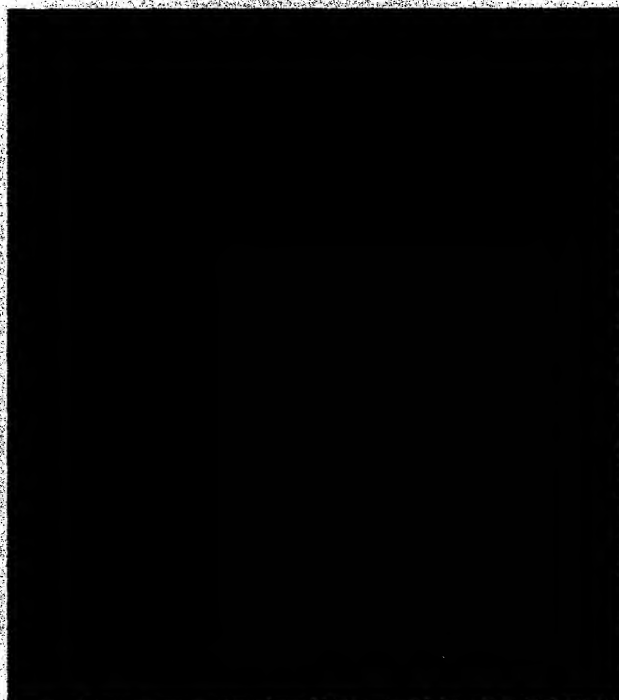


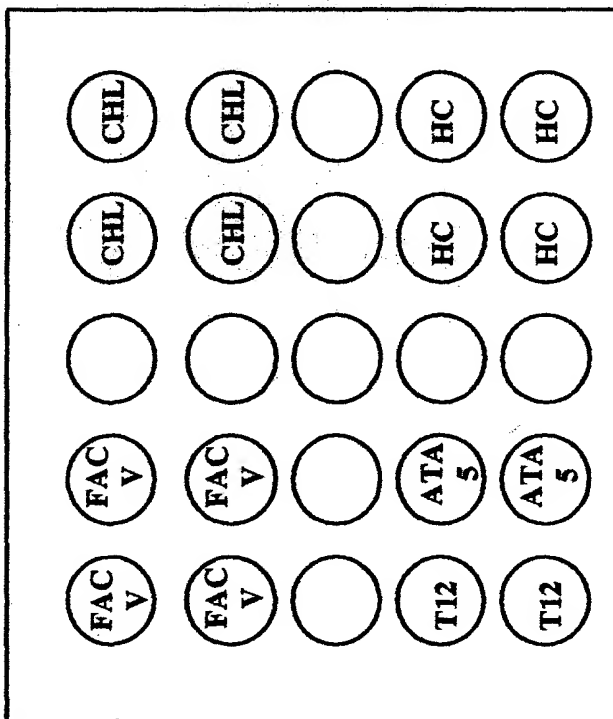
FIG. 15

FIGURE 17



Control - No template +
all reporter oligos

FIGURE 16



Experimental Layout

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FIGURE 18

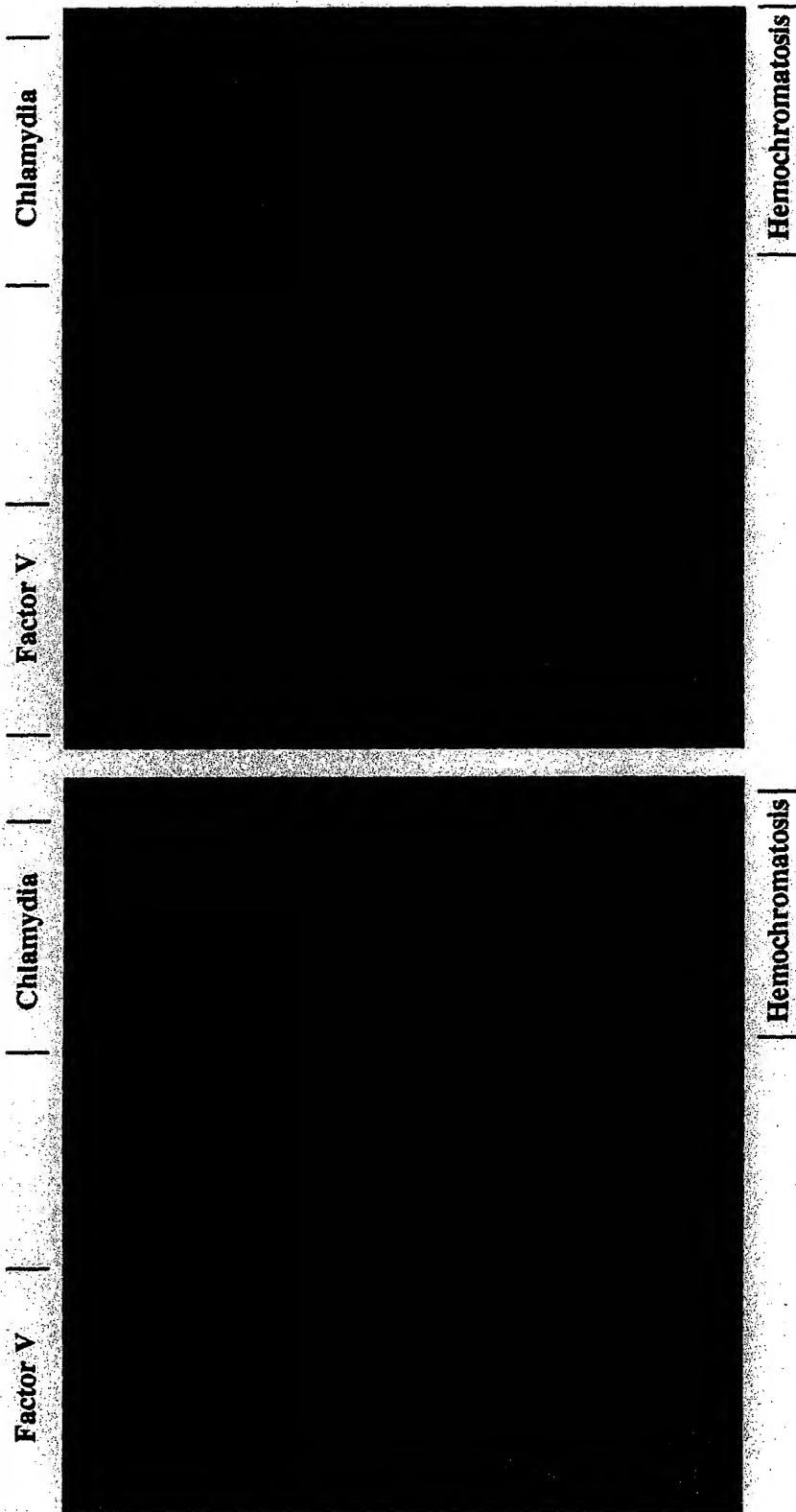


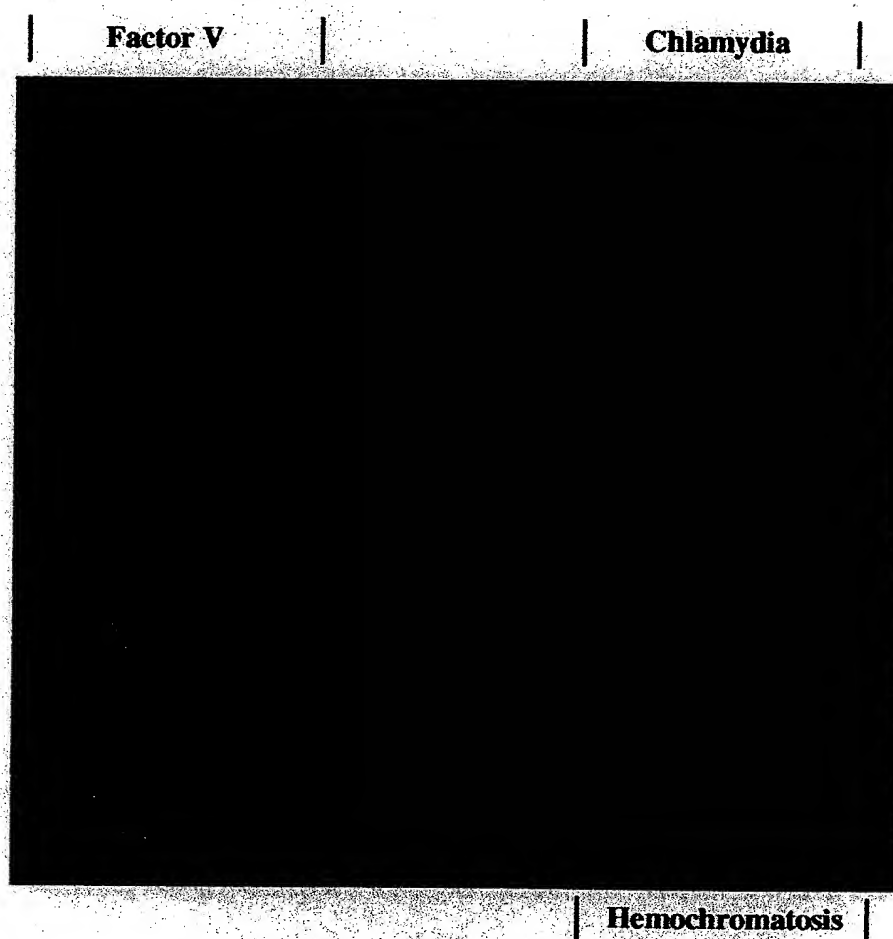
FIGURE 19

All templates + Factor V Reporter oligo
All templates + Factor V, Chlamydia
Reporter Oligos

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FIGURE 20



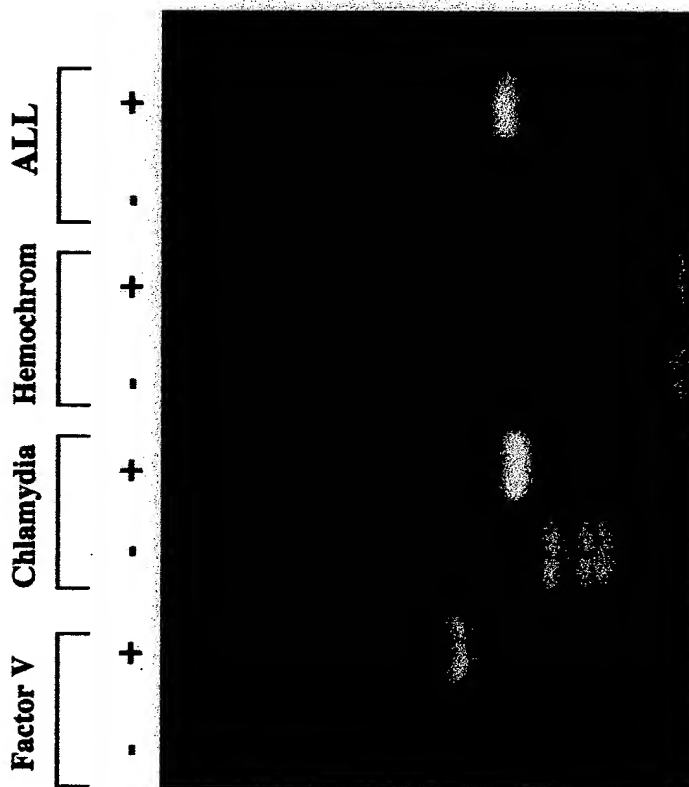
All templates + Factor V, Chlamydia
and Hemachromatosis reporter oligos

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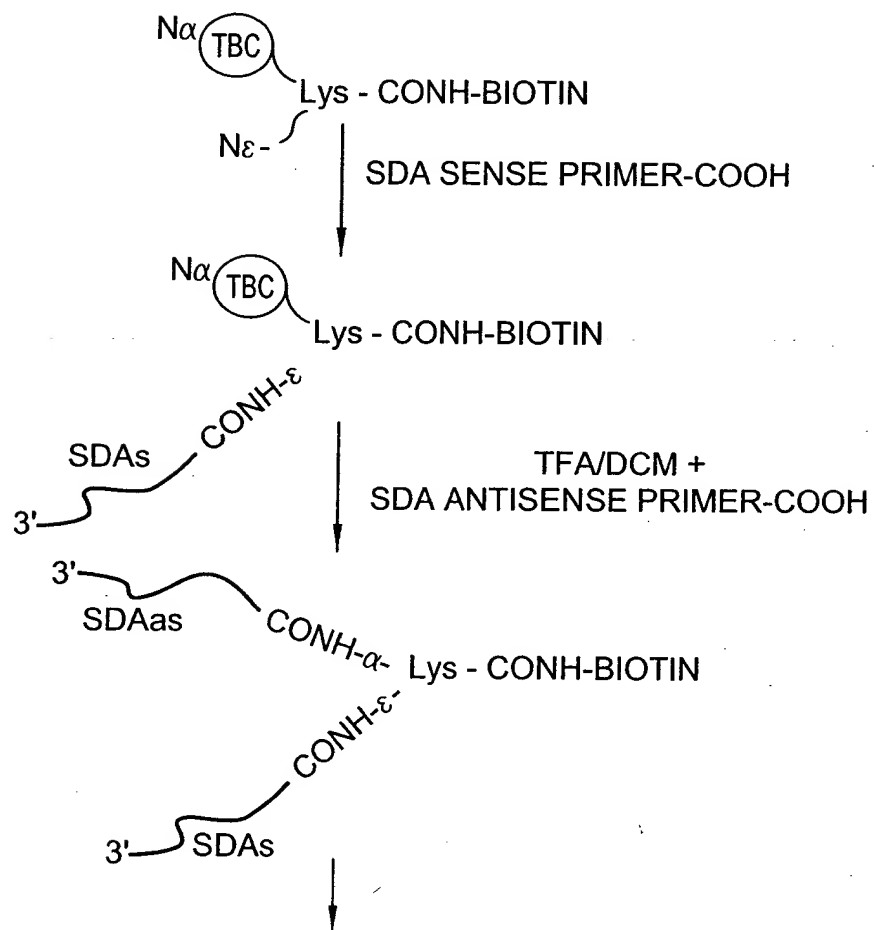
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FIGURE 21



Control Solution SDA reactions

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ATTACH TO STREPTAVIDIN PERMEATION LAYER ON MICROCHIP

FIG. 22

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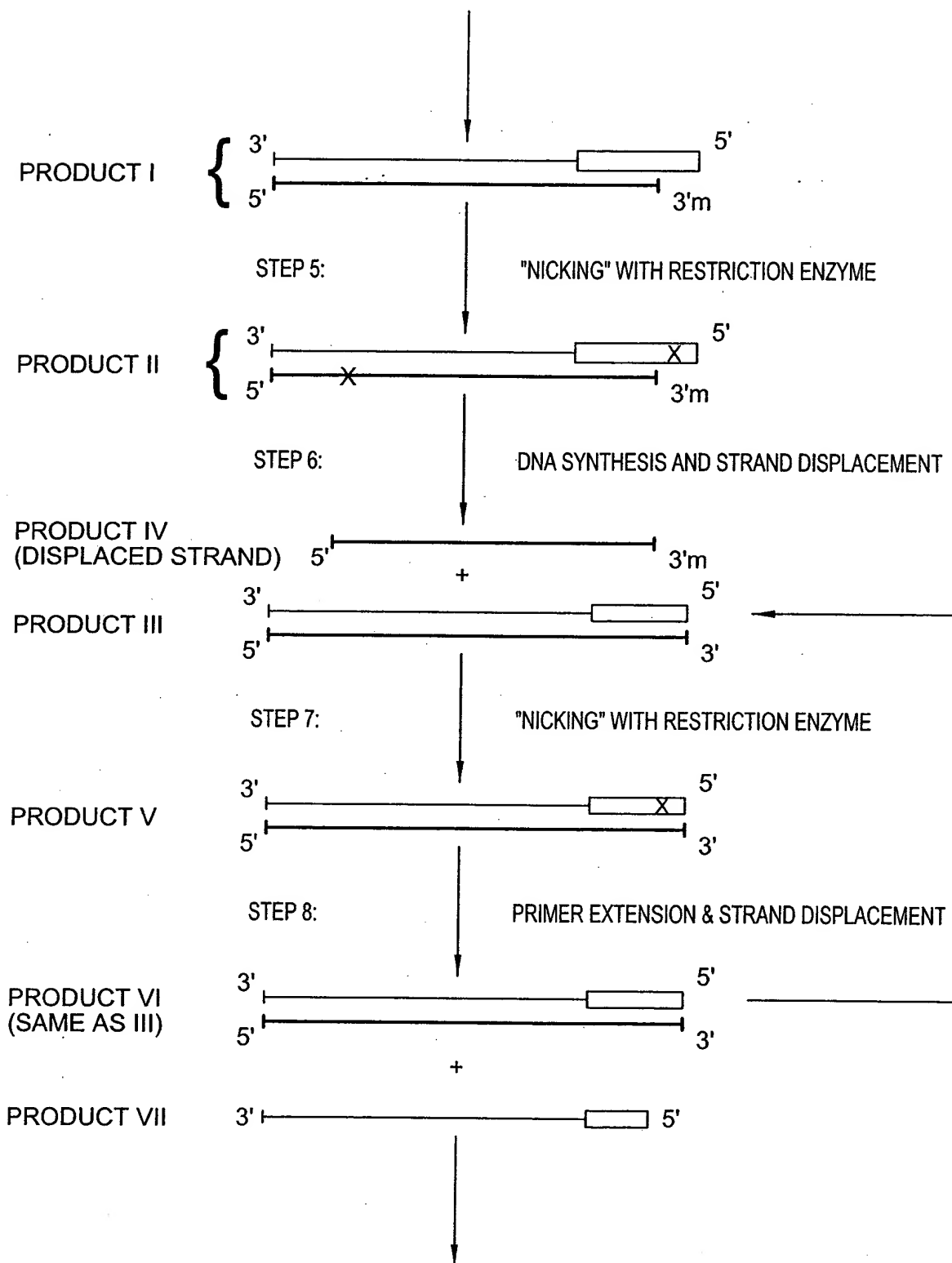
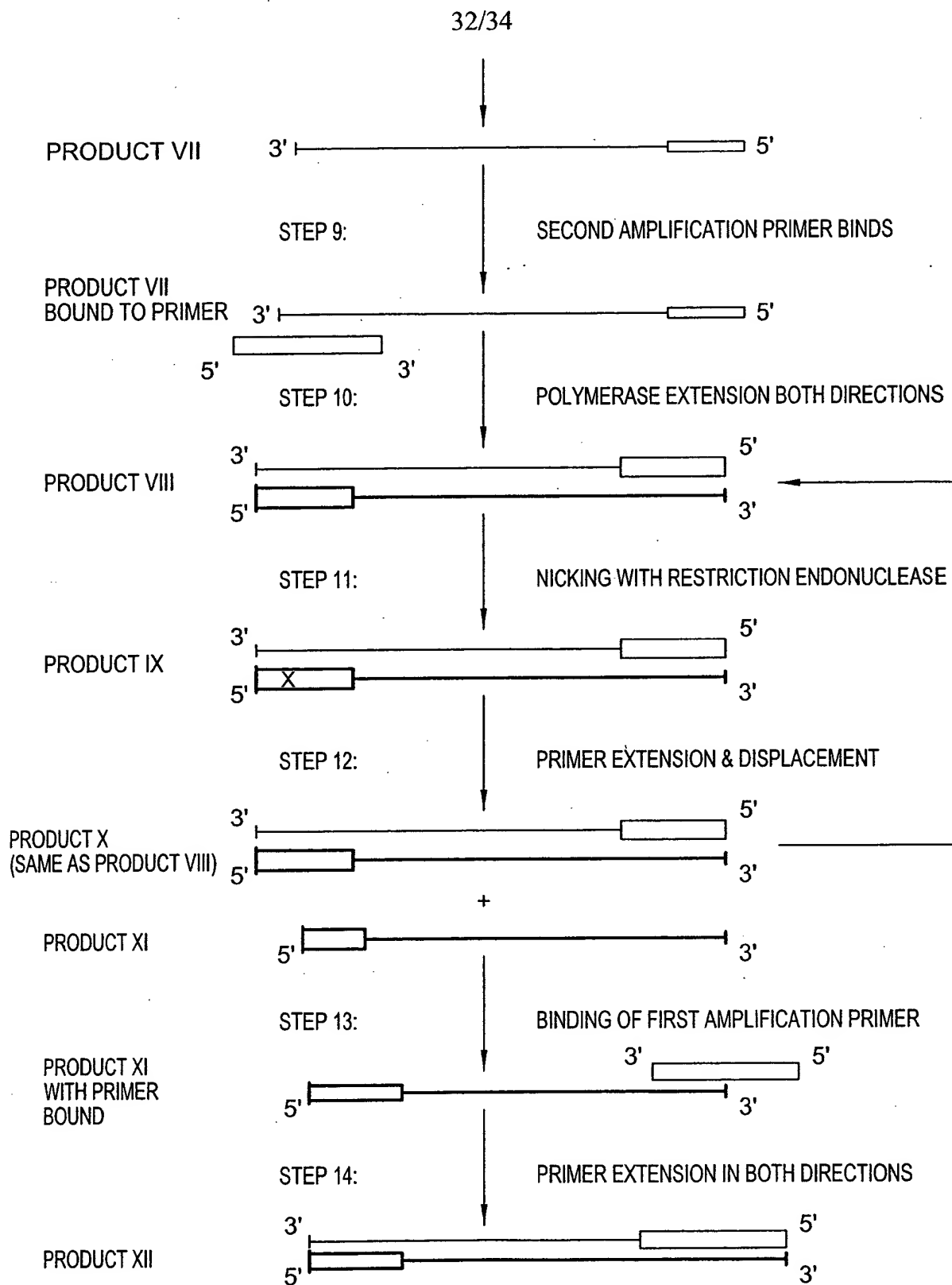


FIG. 23B

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(PRODUCT XII CAN RE-ENTER PATHWAY AND BE FURTHER AMPLIFIED IN A MANNER
 SIMILAR TO PRODUCT III, FOLLOWING STEP 6)

FIG. 23C

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FOOT" 58942660

LIGATION-DEPENDENT DETECTION OF THE SALMONELLA spaQ GENE

LIGATION PROBES LP1 AND LP2:

spaQ¹ TEMPLATE 5'-nnnnncaacatgacatcattacgacggtagttaaatggatgatttagtgnnnnn-3'

LP1² 3'-aattccgcatgagctggtaattgtgtactgtagtaatgctctgc*-5'

3'-cctatcaatttacctactaaatcacgattatccctagatcatgtggctc LP2³

ttcagacctgccttagc-5'

AMPLIFICATION PRIMER SEQUENCES S1 AND S2:

LP1 3'-aattccgcatgagctggtaattgtgtactgtagtaatgctctgc*-5'

SI⁴ 5'-accgcatcgaatgcatgtctcgggaaggcgtaactcgacc

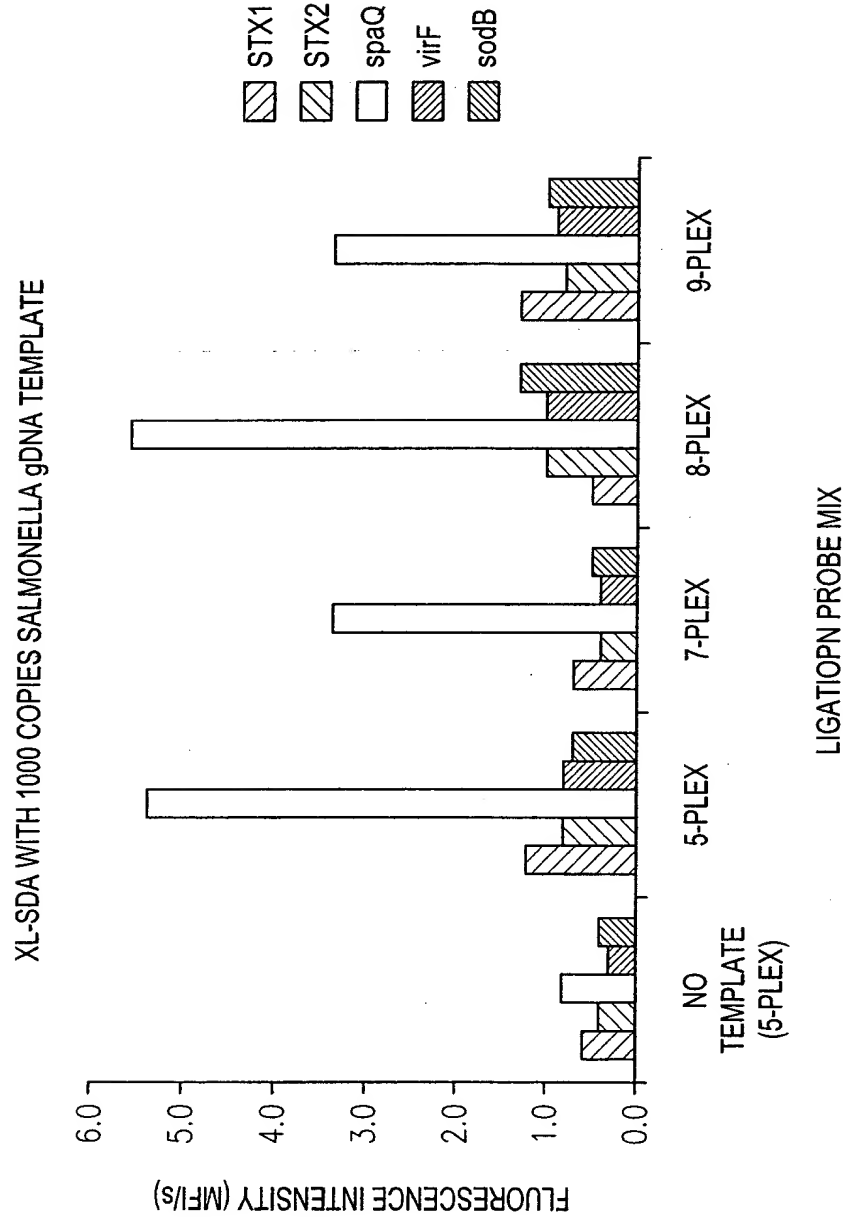
LP2 3'-cctatcaatttacctactaaatcacgattatccctagatcatgtggctc ttcagacctgccttagc-5'

-----S2⁵-----

FIG. 23D

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ELECTRONIC HYBRIDIZATION USING MICROELECTRODE ARRAY OF XL-SDA REACTIONS WITH SALMONELLA GENOMIC DNA AT 1000

FIG. 24